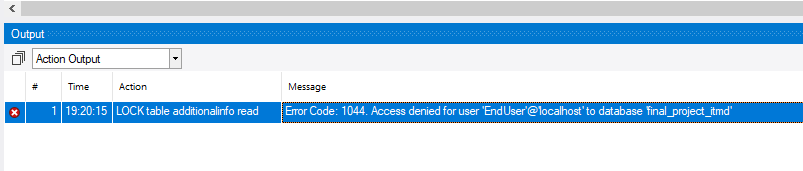
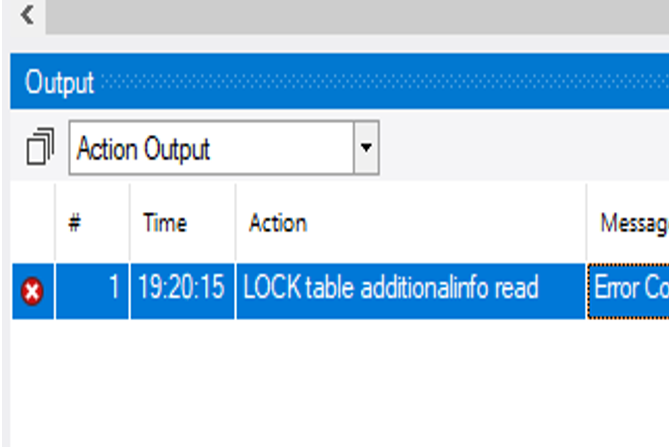
## (1)AC-2 ACCOUNT MANAGEMENT

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Test Case ID** | | a\_001 | **Test Case Description** | | Run a LOCK table query using EndUser without permission | | | | | |
| **Created By** | | Maksym | **Reviewed By** | | Marilyn | | **Version** | | 1.1 | |
| **QA Tester’s Log** | | Log in using a different user |  |  |  |  |  |  |  |  |
| **Tester's Name** | | Maksym | **Date Tested** | | 11/28 | | **Test Case (Pass/Fail/Not Executed)** | | Pass | |
| **S #** | **Prerequisites:** | | |  | **S #** | **Test Data** | | | | |
| 1 | Enter as EndUser | | |  | 1 | username:EndUser | | | | |
| 2 |  | | |  | 2 | password:11111111qqqq | | | | |
| 3 |  | | |  | 3 |  | | | | |
| 4 |  | | |  | 4 |  | | | | |
| **Test Scenario** | Check if the permission setting account access work |  |  |  |  |  |  |  |  |  |
| **Step #** | **Step Details** | | **Expected Results** | | **Actual Results** | | | **Pass / Fail / Not executed / Suspended** | | |
|
| 1 | Login as EndUser | | Credentials can be entered and database can be opened | | As expected | | | Pass | | |
| 2 | Run a simple LOCK table query | | An permission error can be observed | | As expected | | | Pass | | |



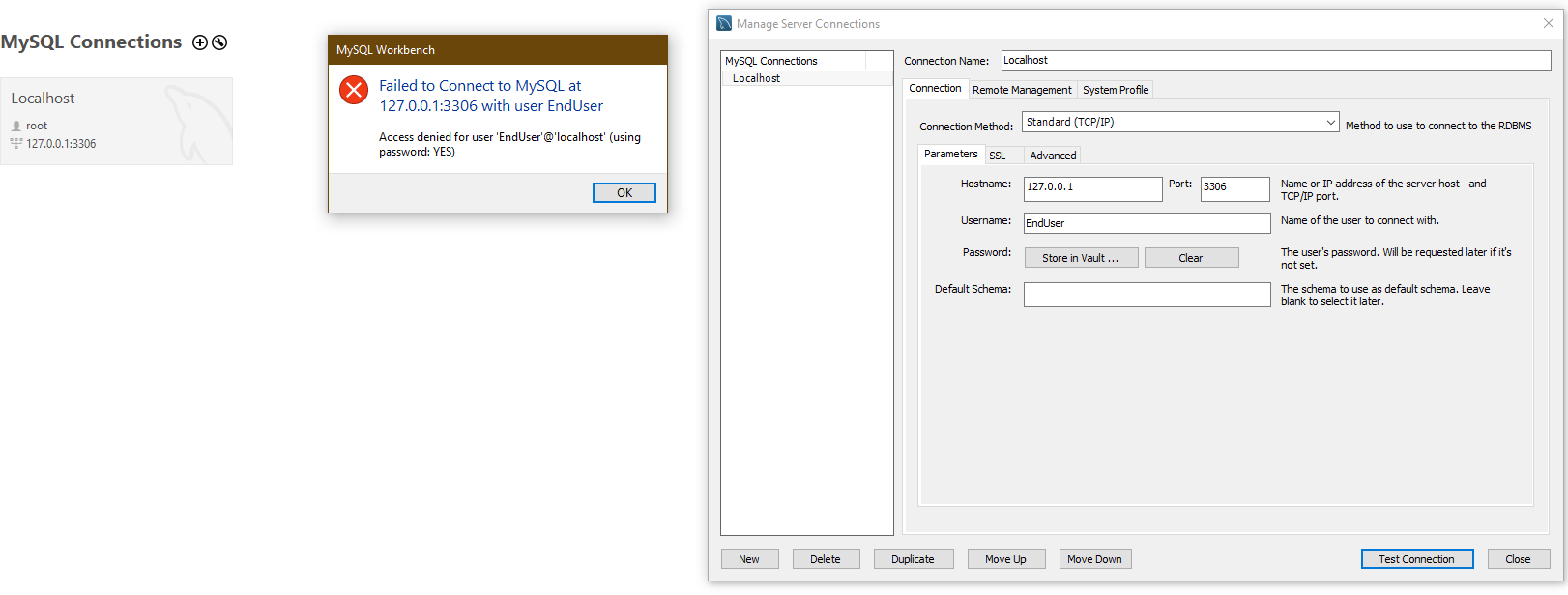
(2)AU-8 TIME STAMPS

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Test Case ID** | | a\_002 | **Test Case Description** | | Run a table query check the output time stamp | | | | | |
| **Created By** | | Maksym | **Reviewed By** | | Marilyn | | **Version** | | 1.1 | |
| **QA Tester’s Log** | | Log in and run any query |  |  |  |  |  |  |  |  |
| **Tester's Name** | | Maksym | **Date Tested** | | 11/28 | | **Test Case (Pass/Fail/Not Executed)** | | Pass | |
| **S #** | **Prerequisites:** | | |  | **S #** | **Test Data** | | | | |
| 1 | Enter as any user | | |  | 1 | username:EndUser | | | | |
| 2 |  | | |  | 2 | password:XXX | | | | |
| 3 |  | | |  | 3 |  | | | | |
| 4 |  | | |  | 4 |  | | | | |
| **Test Scenario** | Check if the timestamps work |  |  |  |  |  |  |  |  |  |
| **Step #** | **Step Details** | | **Expected Results** | | **Actual Results** | | | **Pass / Fail / Not executed / Suspended** | | |
|
| 1 | Login as any user | | Credentials can be entered and database can be opened | | As expected | | | Pass | | |
| 2 | Run a simple query | | Output shows up with a timestamp | | As expected | | | Pass | | |



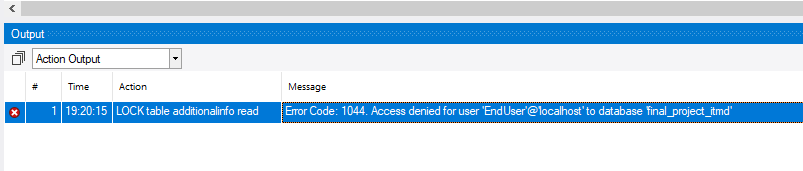
(3)CA-6 SECURITY AUTHORIZATION

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Test Case ID** | | a\_003 | **Test Case Description** | | Try logging in by using a wrong password | | | | | |
| **Created By** | | Maksym | **Reviewed By** | | Marilyn | | **Version** | | 1.1 | |
| **QA Tester’s Log** | | Log in |  |  |  |  |  |  |  |  |
| **Tester's Name** | | Maksym | **Date Tested** | | 11/28 | | **Test Case (Pass/Fail/Not Executed)** | | Pass | |
| **S #** | **Prerequisites:** | | |  | **S #** | **Test Data** | | | | |
| 1 | Enter as any user | | |  | 1 | username:EndUser | | | | |
| 2 |  | | |  | 2 | password:XXX | | | | |
| 3 |  | | |  | 3 |  | | | | |
| 4 |  | | |  | 4 |  | | | | |
| **Test Scenario** | Check if the wrong password works |  |  |  |  |  |  |  |  |  |
| **Step #** | **Step Details** | | **Expected Results** | | **Actual Results** | | | **Pass / Fail / Not executed / Suspended** | | |
|
| 1 | Login as any user | | Wrong credentials can be entered and database can not be opened | | As expected | | | Pass | | |
| 2 |  | |  | |  | | |  | | |



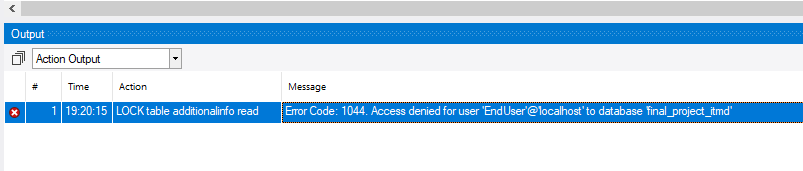
(4)CM-7 LEAST FUNCTIONALITY

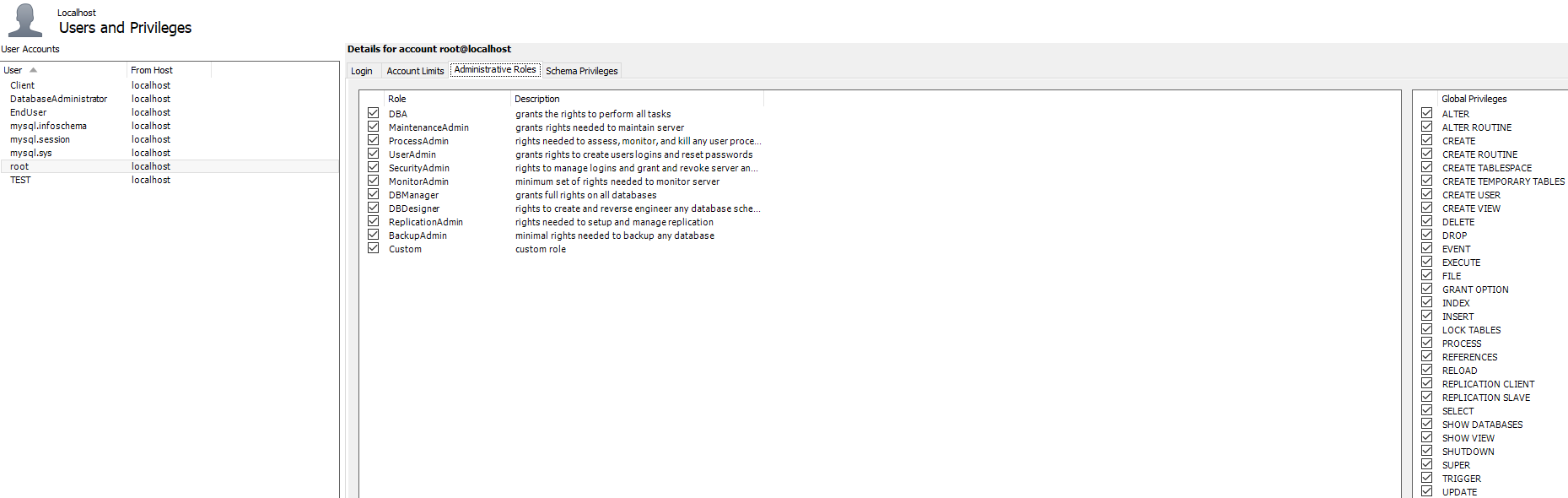
|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Test Case ID** | | a\_004 | **Test Case Description** | | Run a query that is not permitted for a user, observe an error | | | | | |
| **Created By** | | Maksym | **Reviewed By** | | Marilyn | | **Version** | | 1.1 | |
| **QA Tester’s Log** | | Log in using a user without permissions to run a LOCK query table |  |  |  |  |  |  |  |  |
| **Tester's Name** | | Maksym | **Date Tested** | | 11/28 | | **Test Case (Pass/Fail/Not Executed)** | | Pass | |
| **S #** | **Prerequisites:** | | |  | **S #** | **Test Data** | | | | |
| 1 | Enter as EndUser | | |  | 1 | username:EndUser | | | | |
| 2 | Query access | | |  | 2 | password:11111111qqqq | | | | |
| 3 |  | | |  | 3 |  | | | | |
| 4 |  | | |  | 4 |  | | | | |
| **Test Scenario** | Check if the permission setting account access work |  |  |  |  |  |  |  |  |  |
| **Step #** | **Step Details** | | **Expected Results** | | **Actual Results** | | | **Pass / Fail / Not executed / Suspended** | | |
|
| 1 | Login as EndUser | | Credentials can be entered and database can be opened | | As expected | | | Pass | | |
| 2 | Run a simple LOCK table query | | An permission error can be observed | | As expected | | | Pass | | |



(5)SA-3 SYSTEM DEVELOPMENT LIFE CYCLE

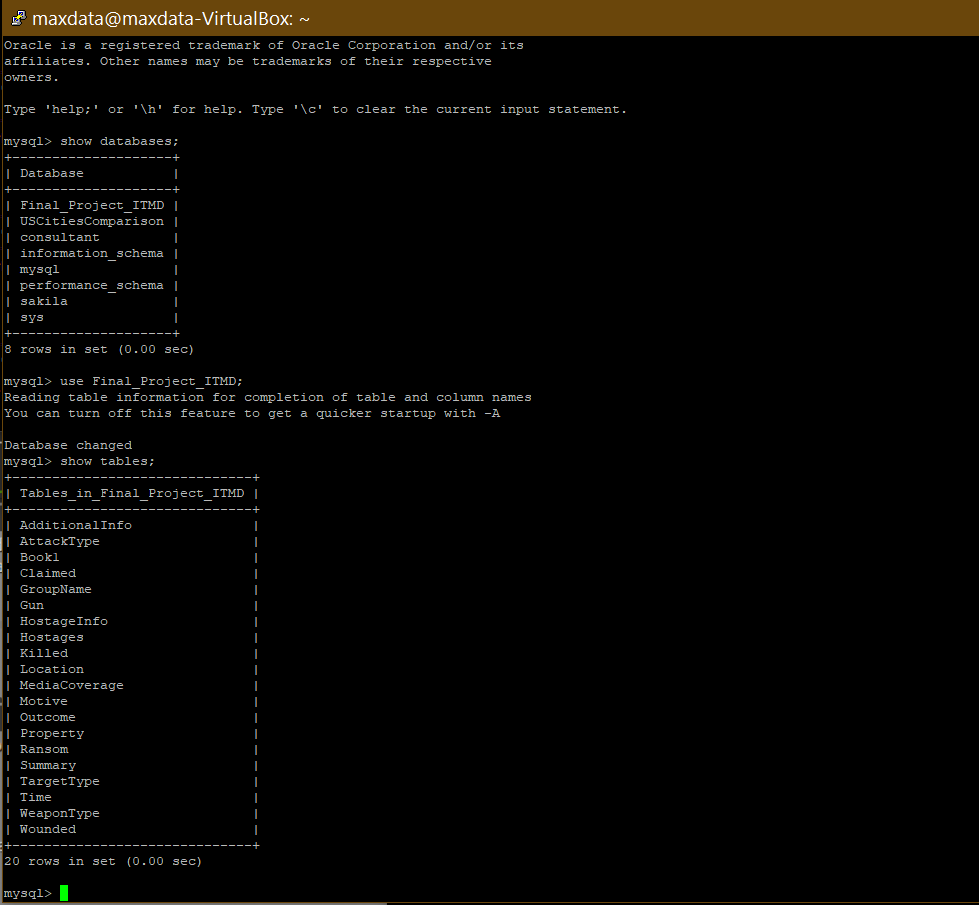
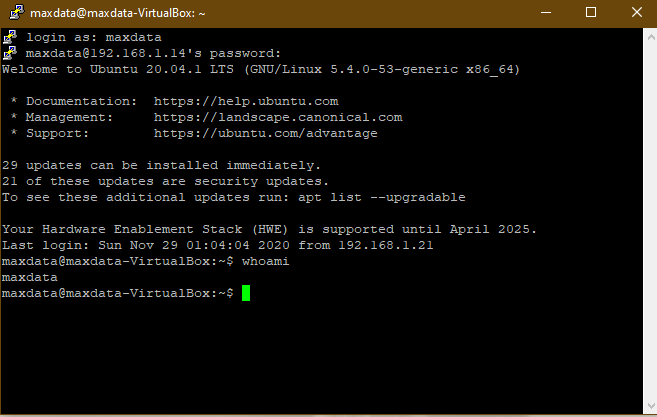
|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Test Case ID** | | a\_005 | **Test Case Description** | | Security roles and responsibilities throughout the system development life cycle check | | | | | |
| **Created By** | | Maksym | **Reviewed By** | | Marilyn | | **Version** | | 1.1 | |
| **QA Tester’s Log** | | Log in as any user with according role |  |  |  |  |  |  |  |  |
| **Tester's Name** | | Maksym | **Date Tested** | | 11/28 | | **Test Case (Pass/Fail/Not Executed)** | | Pass | |
| **S #** | **Prerequisites:** | | |  | **S #** | **Test Data** | | | | |
| 1 | Enter as any user | | |  | 1 | username:EndUser | | | | |
| 2 |  | | |  | 2 | password:XXX | | | | |
| 3 |  | | |  | 3 |  | | | | |
| 4 |  | | |  | 4 |  | | | | |
| **Test Scenario** | Check if the timestamps work |  |  |  |  |  |  |  |  |  |
| **Step #** | **Step Details** | | **Expected Results** | | **Actual Results** | | | **Pass / Fail / Not executed / Suspended** | | |
|
| 1 | Login as any user | | Credentials can be entered and database can be opened | | As expected | | | Pass | | |
| 2 | Run a simple query | | Action is not allowed in this role | | As expected | | | Pass | | |





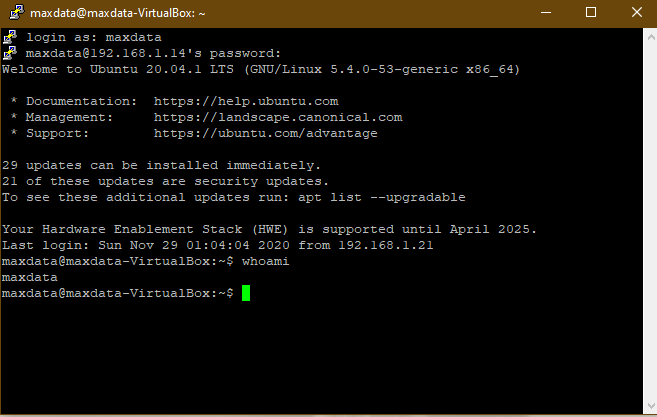
(6)AC-17 REMOTE ACCESS

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Test Case ID** | | a\_006 | **Test Case Description** | | Use SSH to enter database and show tables | | | | | |
| **Created By** | | Maksym | **Reviewed By** | | Marilyn | | **Version** | | 1.1 | |
| **QA Tester’s Log** | | Reviewed ssh commands and mechanics |  |  |  |  |  |  |  |  |
| **Tester's Name** | | Maksym | **Date Tested** | | 11/29/2020 | | **Test Case (Pass/Fail/Not Executed)** | | Pass | |
| **S #** | **Prerequisites:** | | |  | **S #** | **Test Data** | | | | |
| 1 | Have access to a terminal | | |  | 1 | Linux VM credentials username: maxdata | | | | |
| 2 |  | | |  | 2 | usrpassword:11111111aaaa | | | | |
| 3 |  | | |  | 3 |  | | | | |
| 4 |  | | |  | 4 |  | | | | |
| **Test Scenario** | Login in the database using ssh from a different machine |  |  |  |  |  |  |  |  |  |
| **Step #** | **Step Details** | | **Expected Results** | | **Actual Results** | | | **Pass / Fail / Not executed / Suspended** | | |
|
| 1 | Create ssh private and public keys | | Creation success | | As expected | | | Pass | | |
| 2 | Connect to the VM database using SSH | | Connected successfully | | As expected | | | Pass | | |
| 3 | Use admin credentials | | Login | | As expected | | | Pass | | |
| 4 | Using mysql -u root -p login in to the VM’s MySQL server and enter the project database | | Login in the database | | As expected | | | Pass | | |
| 5 | Show tables to complete the test | | Show tables | | As expected | | | Pass | | |



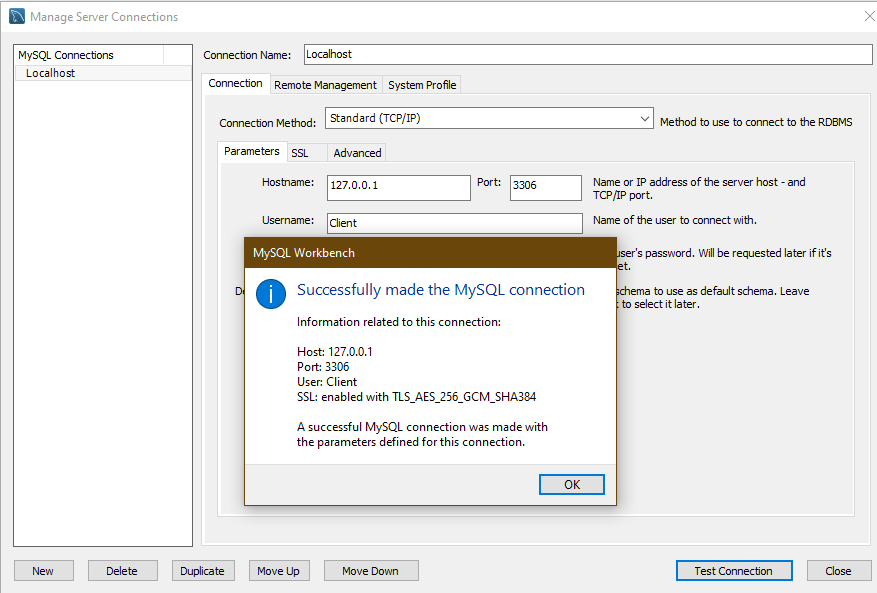
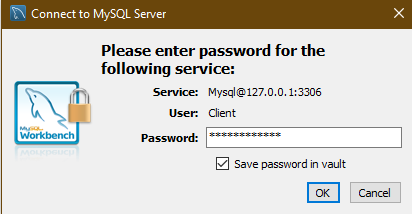
(7)AC-20 USE OF EXTERNAL INFORMATION SYSTEMS

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Test Case ID** | | a\_007 | **Test Case Description** | | Use SSH to enter database and show tables from a external system | | | | | |
| **Created By** | | Maksym | **Reviewed By** | | Marilyn | | **Version** | | 1.1 | |
| **QA Tester’s Log** | | Reviewed ssh commands and mechanics |  |  |  |  |  |  |  |  |
| **Tester's Name** | | Maksym | **Date Tested** | | 11/29/2020 | | **Test Case (Pass/Fail/Not Executed)** | | Pass | |
| **S #** | **Prerequisites:** | | |  | **S #** | **Test Data** | | | | |
| 1 | Have access to a terminal | | |  | 1 | Linux VM credentials username: maxdata | | | | |
| 2 |  | | |  | 2 | usrpassword:11111111aaaa | | | | |
| 3 |  | | |  | 3 |  | | | | |
| 4 |  | | |  | 4 |  | | | | |
| **Test Scenario** | Login in the database using ssh from a windows machine |  |  |  |  |  |  |  |  |  |
| **Step #** | **Step Details** | | **Expected Results** | | **Actual Results** | | | **Pass / Fail / Not executed / Suspended** | | |
|
| 1 | Create ssh private and public keys | | Creation success | | As expected | | | Pass | | |
| 2 | Connect to the VM database using SSH | | Connected successfully | | As expected | | | Pass | | |
| 3 | Use admin credentials | | Login | | As expected | | | Pass | | |



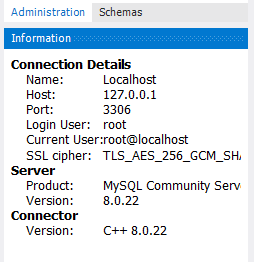
(8)SC-12 CRYPTOGRAPHIC KEY ESTABLISHMENT AND MANAGEMENT

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Test Case ID** | | a\_008 | **Test Case Description** | | Try logging in using a key stored in MySql Workbench vault | | | | | |
| **Created By** | | Maksym | **Reviewed By** | | Marilyn | | **Version** | | 1.1 | |
| **QA Tester’s Log** | | Test Loging in |  |  |  |  |  |  |  |  |
| **Tester's Name** | | Maksym | **Date Tested** | | 11/28 | | **Test Case (Pass/Fail/Not Executed)** | | Pass | |
| **S #** | **Prerequisites:** | | |  | **S #** | **Test Data** | | | | |
| 1 | Enter as any user using the SHA key | | |  | 1 | username:EndUser | | | | |
| 2 |  | | |  | 2 |  | | | | |
| 3 |  | | |  | 3 |  | | | | |
| 4 |  | | |  | 4 |  | | | | |
| **Test Scenario** | Check if the wrong password works |  |  |  |  |  |  |  |  |  |
| **Step #** | **Step Details** | | **Expected Results** | | **Actual Results** | | | **Pass / Fail / Not executed / Suspended** | | |
|
| 1 | Login as any user | | Wrong credentials can be entered and database can not be opened | | As expected | | | Pass | | |
| 2 |  | |  | |  | | |  | | |



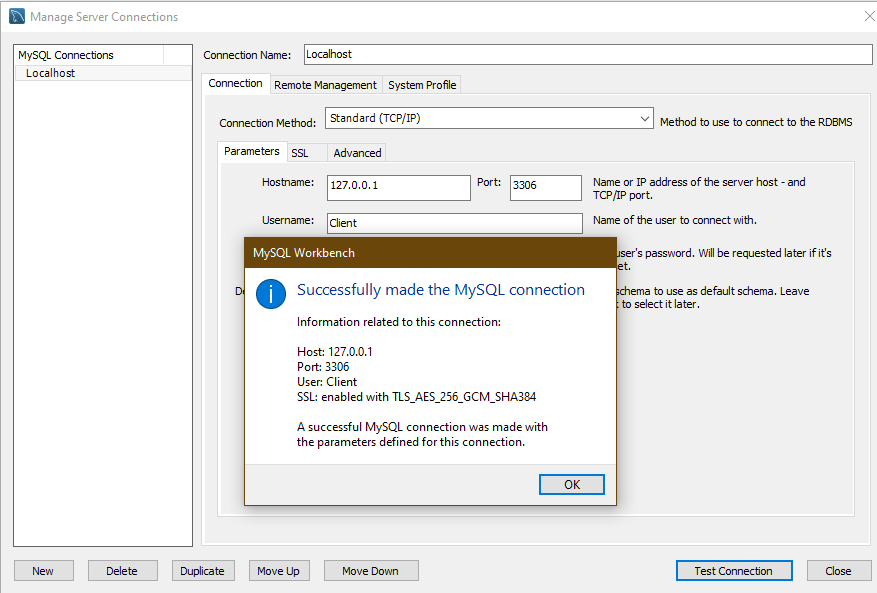
(9) AC-14 PERMITTED ACTIONS WITHOUT IDENTIFICATION OR AUTHENTICATION

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Test Case ID** | | a\_009 | **Test Case Description** | | Try logging without a an authentication | | | | | |
| **Created By** | | Maksym | **Reviewed By** | | Marilyn | | **Version** | | 1.1 | |
| **QA Tester’s Log** | | Test Loging in |  |  |  |  |  |  |  |  |
| **Tester's Name** | | Maksym | **Date Tested** | | 11/28 | | **Test Case (Pass/Fail/Not Executed)** | | Pass | |
| **S #** | **Prerequisites:** | | |  | **S #** | **Test Data** | | | | |
| 1 | Enter as any root using the SHA key | | |  | 1 | username:EndUser | | | | |
| 2 |  | | |  | 2 | - | | | | |
| 3 |  | | |  | 3 |  | | | | |
| 4 |  | | |  | 4 |  | | | | |
| **Test Scenario** | Check if the logging in works |  |  |  |  |  |  |  |  |  |
| **Step #** | **Step Details** | | **Expected Results** | | **Actual Results** | | | **Pass / Fail / Not executed / Suspended** | | |
|
| 1 | Login as root without password | | Wrong credentials can be entered and database can not be opened | | As expected | | | Pass | | |



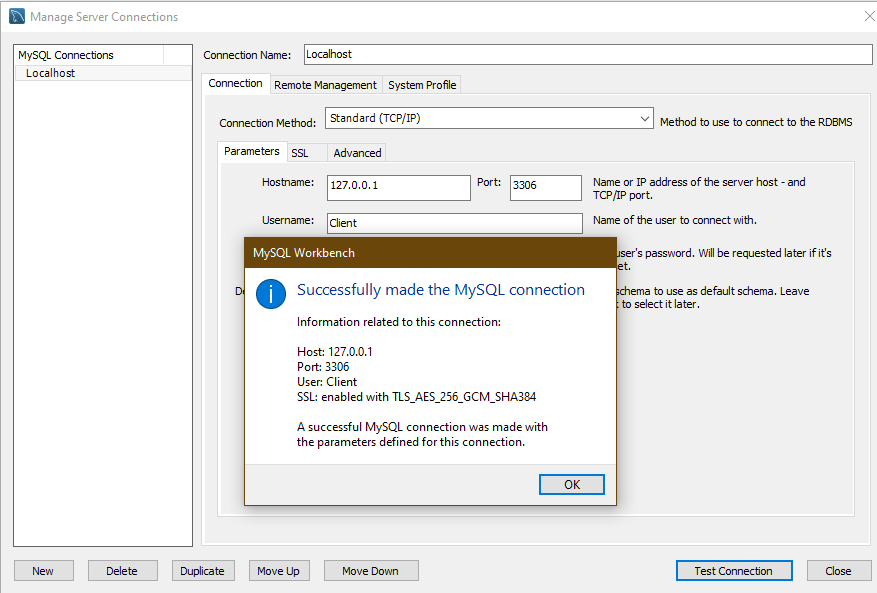
(10) IA-6 AUTHENTICATOR FEEDBACK

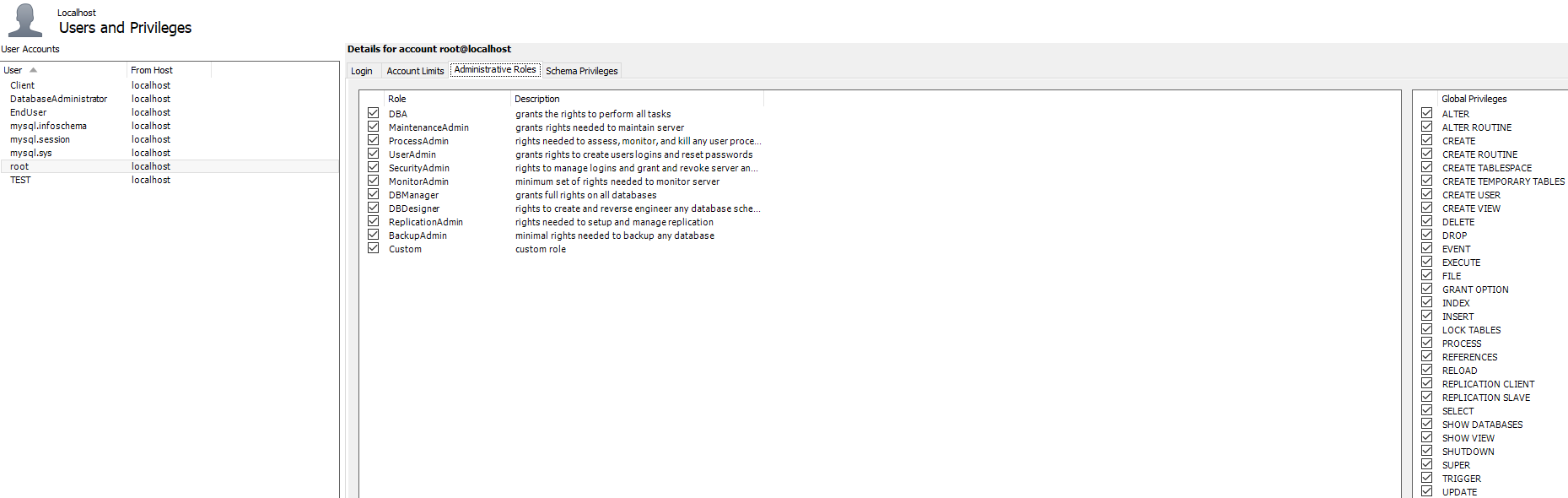
|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Test Case ID** | | a\_010 | **Test Case Description** | | Try logging in using a key stored in MySql Workbench vault | | | | | |
| **Created By** | | Maksym | **Reviewed By** | | Marilyn | | **Version** | | 1.1 | |
| **QA Tester’s Log** | | Test Loging in and watching the authentication feedback |  |  |  |  |  |  |  |  |
| **Tester's Name** | | Maksym | **Date Tested** | | 11/28 | | **Test Case (Pass/Fail/Not Executed)** | | Pass | |
| **S #** | **Prerequisites:** | | |  | **S #** | **Test Data** | | | | |
| 1 | Enter as any user using the SHA key | | |  | 1 | Username:(ANY) | | | | |
| 2 |  | | |  | 2 |  | | | | |
| 3 |  | | |  | 3 |  | | | | |
| 4 |  | | |  | 4 |  | | | | |
| **Test Scenario** | Check if the login gives a feedback |  |  |  |  |  |  |  |  |  |
| **Step #** | **Step Details** | | **Expected Results** | | **Actual Results** | | | **Pass / Fail / Not executed / Suspended** | | |
|
| 1 | Login as any user | | Check for the logging window feedback | | As expected | | | Pass | | |
| 2 |  | |  | |  | | |  | | |



(11)IA-5 AUTHENTICATOR MANAGEMENT

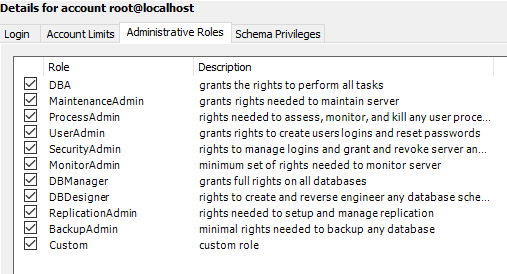
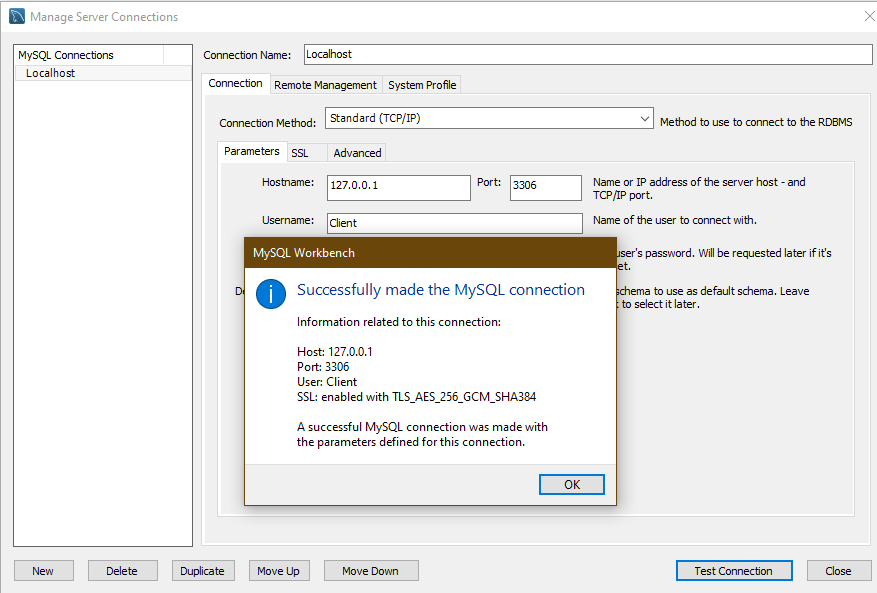
|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Test Case ID** | | a\_011 | **Test Case Description** | | Try logging in and testing the authenticator | | | | | |
| **Created By** | | Maksym | **Reviewed By** | | Marilyn | | **Version** | | 1.1 | |
| **QA Tester’s Log** | | Test Loging in and watching the  authentication |  |  |  |  |  |  |  |  |
| **Tester's Name** | | Maksym | **Date Tested** | | 11/28 | | **Test Case (Pass/Fail/Not Executed)** | | Pass | |
| **S #** | **Prerequisites:** | | |  | **S #** | **Test Data** | | | | |
| 1 | Enter as any user | | |  | 1 | Username:(ANY) | | | | |
| 2 |  | | |  | 2 |  | | | | |
| 3 |  | | |  | 3 |  | | | | |
| 4 |  | | |  | 4 |  | | | | |
| **Test Scenario** | Check if the Authenticator Management works |  |  |  |  |  |  |  |  |  |
| **Step #** | **Step Details** | | **Expected Results** | | **Actual Results** | | | **Pass / Fail / Not executed / Suspended** | | |
|
| 1 | Login as any user | | Check for the Authenticator Management reaction | | As expected | | | Pass | | |
| 2 |  | |  | |  | | |  | | |





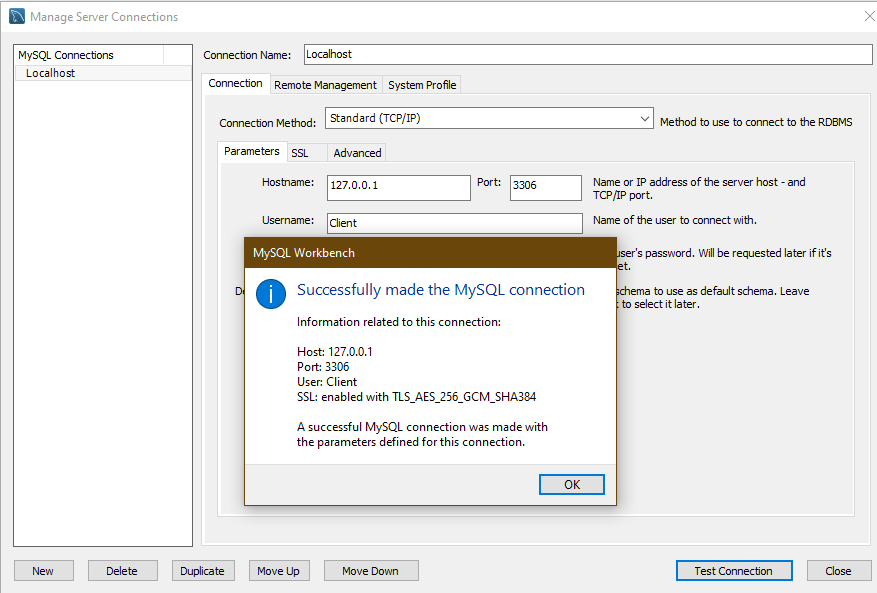
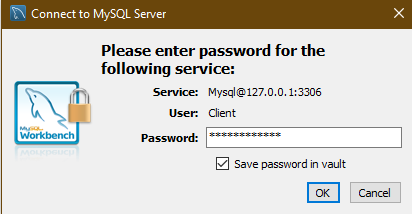
(12)IA-4 IDENTIFIER MANAGEMENT

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Test Case ID** | | a\_012 | **Test Case Description** | | Try to log in and test if the identification system work | | | | | |
| **Created By** | | Maksym | **Reviewed By** | | Marilyn | | **Version** | | 1.1 | |
| **QA Tester’s Log** | | Test Loging in identification system |  |  |  |  |  |  |  |  |
| **Tester's Name** | | Maksym | **Date Tested** | | 11/28 | | **Test Case (Pass/Fail/Not Executed)** | | Pass | |
| **S #** | **Prerequisites:** | | |  | **S #** | **Test Data** | | | | |
| 1 | Enter as root | | |  | 1 | Username:root | | | | |
| 2 |  | | |  | 2 | Password:XXX | | | | |
| 3 |  | | |  | 3 |  | | | | |
| 4 |  | | |  | 4 |  | | | | |
| **Test Scenario** | Check if the identification system gives feedback |  |  |  |  |  |  |  |  |  |
| **Step #** | **Step Details** | | **Expected Results** | | **Actual Results** | | | **Pass / Fail / Not executed / Suspended** | | |
|
| 1 | Login as root | | Check for the identification system working | | As expected | | | Pass | | |
| 2 |  | |  | |  | | |  | | |



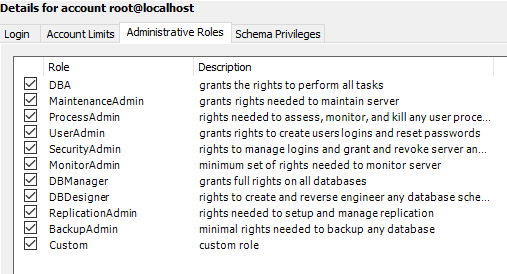
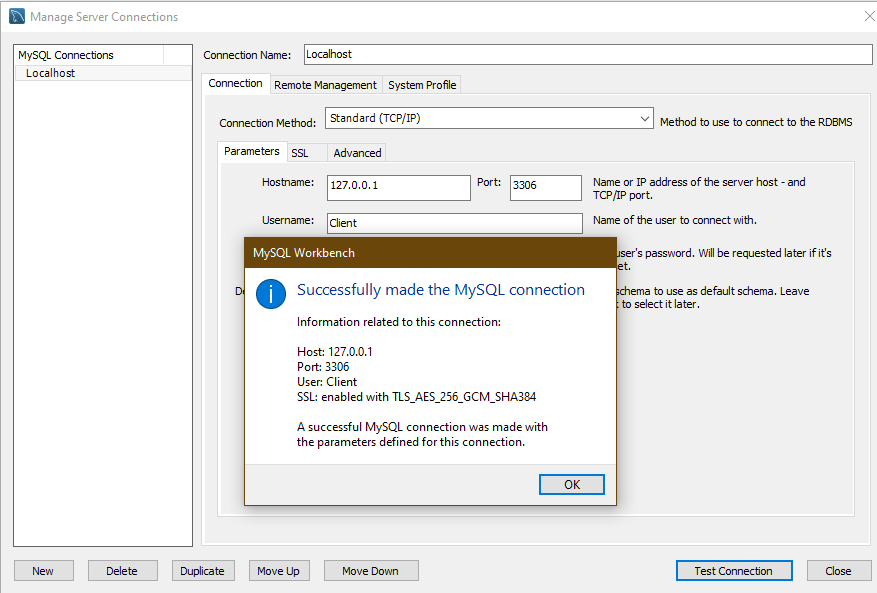
(13)IA-7 CRYPTOGRAPHIC MODULE AUTHENTICATION

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Test Case ID** | | a\_0013 | **Test Case Description** | | Try logging in using a key stored in MySql Workbench vault | | | | | |
| **Created By** | | Maksym | **Reviewed By** | | Marilyn | | **Version** | | 1.1 | |
| **QA Tester’s Log** | | Test Loging in |  |  |  |  |  |  |  |  |
| **Tester's Name** | | Maksym | **Date Tested** | | 11/28 | | **Test Case (Pass/Fail/Not Executed)** | | Pass | |
| **S #** | **Prerequisites:** | | |  | **S #** | **Test Data** | | | | |
| 1 | Enter as any user using the SHA key | | |  | 1 | username:Client | | | | |
| 2 |  | | |  | 2 |  | | | | |
| 3 |  | | |  | 3 |  | | | | |
| 4 |  | | |  | 4 |  | | | | |
| **Test Scenario** | Check if the wrong password works |  |  |  |  |  |  |  |  |  |
| **Step #** | **Step Details** | | **Expected Results** | | **Actual Results** | | | **Pass / Fail / Not executed / Suspended** | | |
|
| 1 | Login as any user | | Wrong credentials can be entered and database can not be opened | | As expected | | | Pass | | |
| 2 |  | |  | |  | | |  | | |



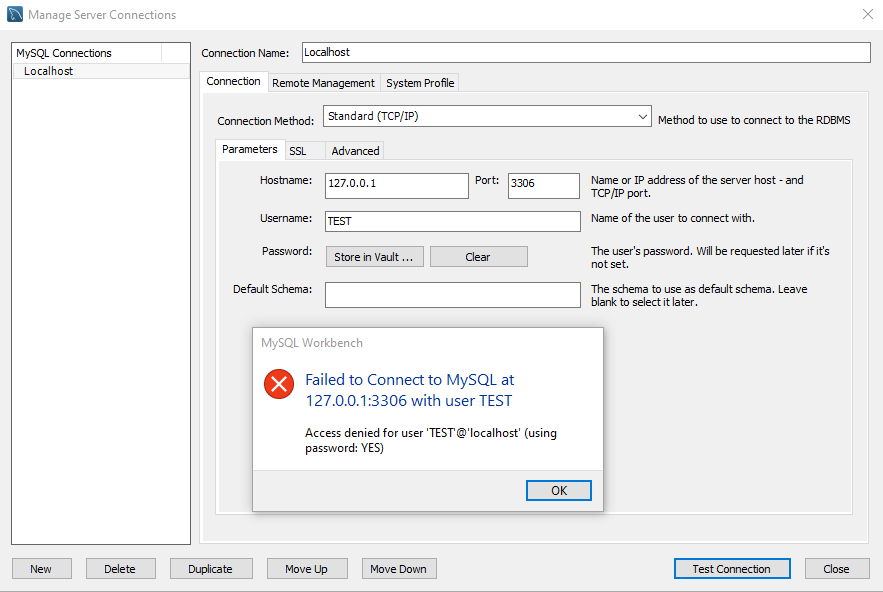
(14)IA-8 IDENTIFICATION AND AUTHENTICATION

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Test Case ID** | | a\_014 | **Test Case Description** | | Try to log in and test if the identification system work | | | | | |
| **Created By** | | Maksym | **Reviewed By** | | Marilyn | | **Version** | | 1.1 | |
| **QA Tester’s Log** | | Test Loging in identification system |  |  |  |  |  |  |  |  |
| **Tester's Name** | | Maksym | **Date Tested** | | 11/28 | | **Test Case (Pass/Fail/Not Executed)** | | Pass | |
| **S #** | **Prerequisites:** | | |  | **S #** | **Test Data** | | | | |
| 1 | Enter as root | | |  | 1 | Username:root | | | | |
| 2 |  | | |  | 2 | Password:XXX | | | | |
| 3 |  | | |  | 3 |  | | | | |
| 4 |  | | |  | 4 |  | | | | |
| **Test Scenario** | Check if the identification system gives feedback |  |  |  |  |  |  |  |  |  |
| **Step #** | **Step Details** | | **Expected Results** | | **Actual Results** | | | **Pass / Fail / Not executed / Suspended** | | |
|
| 1 | Login as root | | Check for the identification system working | | As expected | | | Pass | | |
| 2 |  | |  | |  | | |  | | |



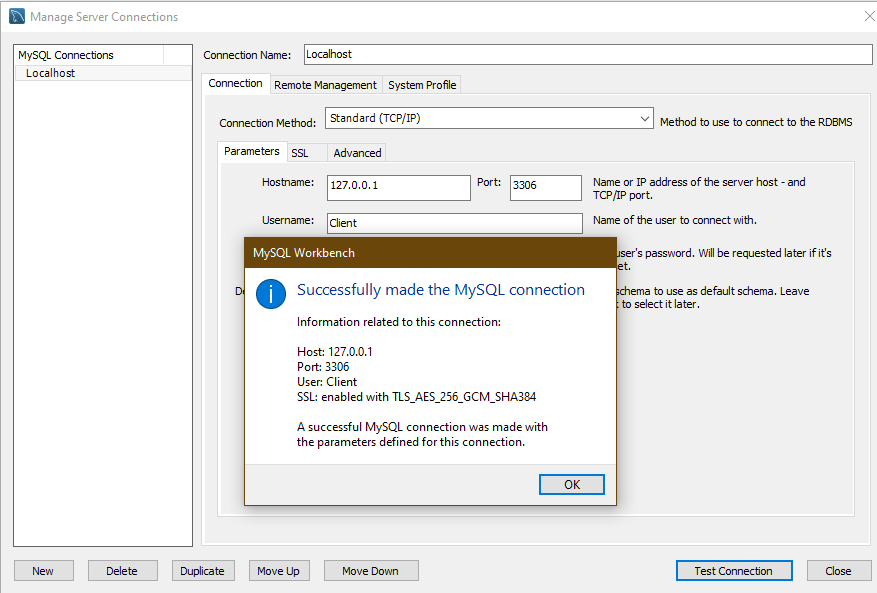
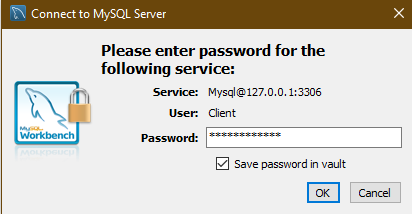
(15)SI-5 SECURITY ALERTS, ADVISORIES, AND DIRECTIVES

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Test Case ID** | | a\_015 | **Test Case Description** | | Try logging in by using a wrong password and checking for security alerts | | | | | |
| **Created By** | | Maksym | **Reviewed By** | | Marilyn | | **Version** | | 1.1 | |
| **QA Tester’s Log** | | Log in |  |  |  |  |  |  |  |  |
| **Tester's Name** | | Maksym | **Date Tested** | | 11/28 | | **Test Case (Pass/Fail/Not Executed)** | | Pass | |
| **S #** | **Prerequisites:** | | |  | **S #** | **Test Data** | | | | |
| 1 | Enter as any user | | |  | 1 | username:TEST | | | | |
| 2 |  | | |  | 2 | password:XXX | | | | |
| 3 |  | | |  | 3 |  | | | | |
| 4 |  | | |  | 4 |  | | | | |
| **Test Scenario** | Check if the wrong password works |  |  |  |  |  |  |  |  |  |
| **Step #** | **Step Details** | | **Expected Results** | | **Actual Results** | | | **Pass / Fail / Not executed / Suspended** | | |
|
| 1 | Login as TEST user | | Wrong credentials can be entered and database can not be opened and a security message is shown | | As expected | | | Pass | | |
| 2 |  | |  | |  | | |  | | |



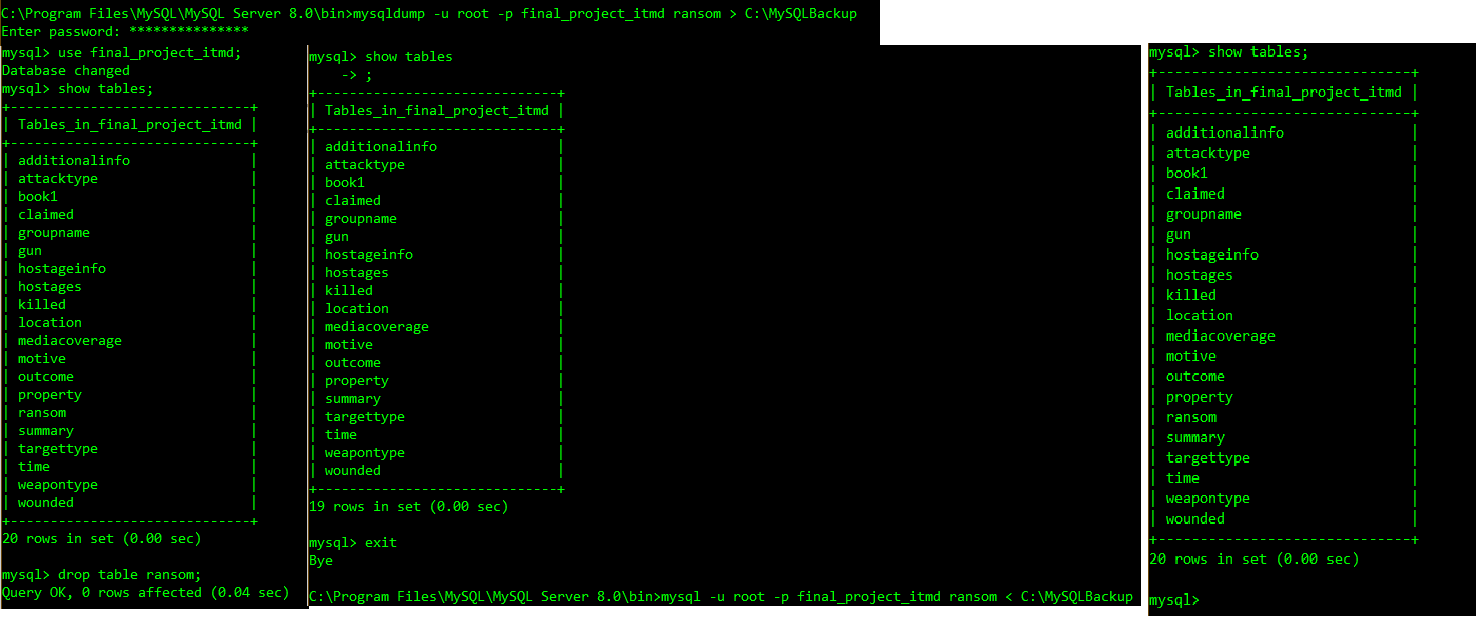
(16)SC-13 CRYPTOGRAPHIC PROTECTION

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Test Case ID** | | a\_0016 | **Test Case Description** | | Try logging in using a key stored in MySql Workbench vault (password is encrypted) | | | | | |
| **Created By** | | Maksym | **Reviewed By** | | Marilyn | | **Version** | | 1.1 | |
| **QA Tester’s Log** | | Test Loging in |  |  |  |  |  |  |  |  |
| **Tester's Name** | | Maksym | **Date Tested** | | 11/28 | | **Test Case (Pass/Fail/Not Executed)** | | Pass | |
| **S #** | **Prerequisites:** | | |  | **S #** | **Test Data** | | | | |
| 1 | Enter as any user using the SHA key | | |  | 1 | username:Client | | | | |
| 2 |  | | |  | 2 |  | | | | |
| 3 |  | | |  | 3 |  | | | | |
| 4 |  | | |  | 4 |  | | | | |
| **Test Scenario** | Check if the wrong password works |  |  |  |  |  |  |  |  |  |
| **Step #** | **Step Details** | | **Expected Results** | | **Actual Results** | | | **Pass / Fail / Not executed / Suspended** | | |
|
| 1 | Login as any user | | Wrong credentials can be entered and database can not be opened | | As expected | | | Pass | | |
| 2 |  | |  | |  | | |  | | |



(17)CP-9 INFORMATION SYSTEM BACKUP

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Test Case ID** | | a\_017 | **Test Case Description** | Deleting 1 table form the database and restoring it using the backup data file | | | | | |
| **Created By** | | Maksym | **Reviewed By** |  | | **Version** | | 1.0 | |
| **QA Tester’s Log** | | Used powershell |  |  |  |  |  |  |  |
| **Tester's Name** | | Maksym | **Date Tested** | 11/29/2020 | | **Test Case (Pass/Fail/Not Executed)** | | Pass | |
| **S #** | **Prerequisites:** | | | **S #** | **Test Data** | | | | |
| 1 | Terminal | | | 1 | Userid = root | | | | |
| 2 | Root password | | | 2 | Userpassword = XXX | | | | |
| 3 |  | | | 3 |  | | | | |
| 4 |  | | | 4 |  | | | | |
| **Test Scenario** | Verify that the backup file works and restores the dropped table in the database |  |  |  |  |  |  |  |  |
| **Step #** | **Step Details** | | **Expected Results** | **Actual Results** | | | **Pass / Fail / Not executed / Suspended** | | |
|
| 1 | Use final\_project\_itmd database and drop table ransom | | Logged and table ransom is not located | As Expected | | | Pass | | |
| 2 | Use mysqldump -u root -p final\_project\_itmd ransom < C:\MySQLBackup command to restore the table which was deleted | | The table will be restored based on the backup recorded | As Expected | | | Pass | | |
| 3 | Observe the renewed table | |  | As Expected | | | Pass | | |



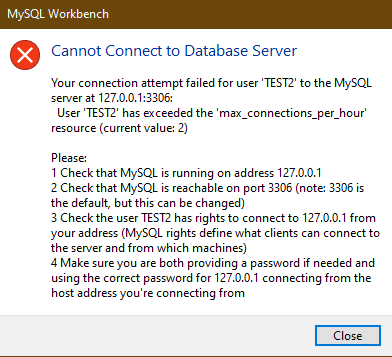
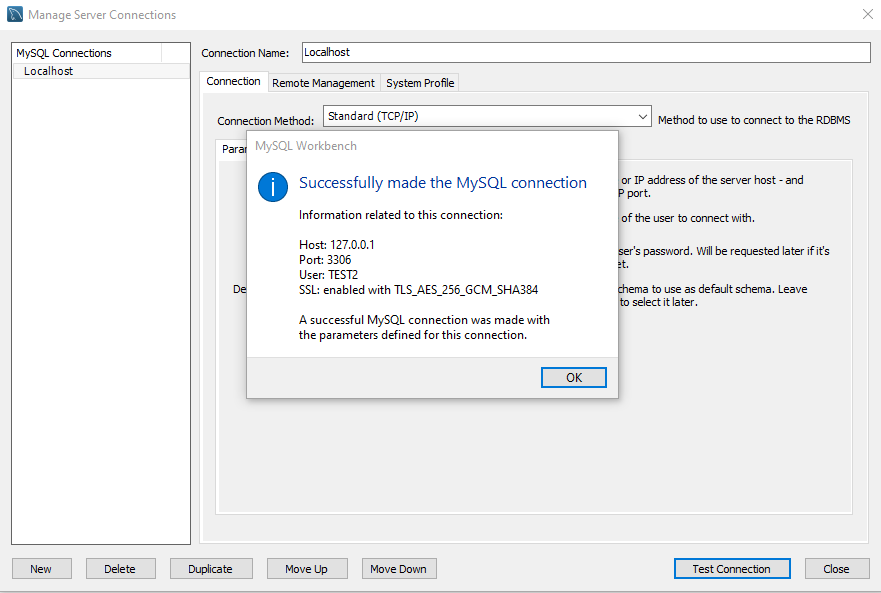
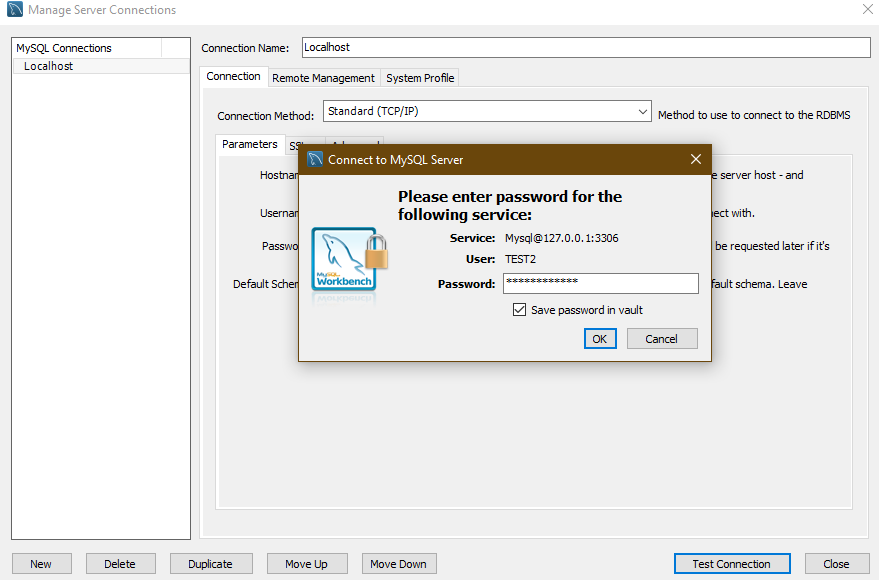
(18)SI-12 INFORMATION HANDLING AND RETENTION

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Test Case ID** | | a\_018 | **Test Case Description** | Deleting 1 table form the database and restoring it using the backup data file | | | | | |
| **Created By** | | Maksym | **Reviewed By** |  | | **Version** | | 1.0 | |
| **QA Tester’s Log** | | Used powershell |  |  |  |  |  |  |  |
| **Tester's Name** | | Maksym | **Date Tested** | 11/29/2020 | | **Test Case (Pass/Fail/Not Executed)** | | Pass | |
| **S #** | **Prerequisites:** | | | **S #** | **Test Data** | | | | |
| 1 | Terminal | | | 1 | Userid = root | | | | |
| 2 | Root password | | | 2 | Userpassword = XXX | | | | |
| 3 |  | | | 3 |  | | | | |
| 4 |  | | | 4 |  | | | | |
| **Test Scenario** | Verify that the backup file works and restores the dropped table in the database |  |  |  |  |  |  |  |  |
| **Step #** | **Step Details** | | **Expected Results** | **Actual Results** | | | **Pass / Fail / Not executed / Suspended** | | |
|
| 1 | Use final\_project\_itmd database and drop table ransom | | Logged and table ransom is not located | As Expected | | | Pass | | |
| 2 | Use mysqldump -u root -p final\_project\_itmd ransom < C:\MySQLBackup command to restore the table which was deleted | | The table will be restored based on the backup recorded | As Expected | | | Pass | | |
| 3 | Observe the renewed table | |  | As Expected | | | Pass | | |

## 

(19) PS-4 PERSONNEL TERMINATION

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Test Case ID** | | a\_019 | **Test Case Description** | | Create a use and disable for testing | | | | | |
| **Created By** | | Maksym | **Reviewed By** | | Marilyn | | **Version** | | 1.1 | |
| **QA Tester’s Log** | | Create a new test user and disable him |  |  |  |  |  |  |  |  |
| **Tester's Name** | | Maksym | **Date Tested** | | 11/28 | | **Test Case (Pass/Fail/Not Executed)** | | Pass | |
| **S #** | **Prerequisites:** | | |  | **S #** | **Test Data** | | | | |
| 1 | Create new user TEST2 | | |  | 1 | username:TEST2 | | | | |
| 2 |  | | |  | 2 | password:11111111qqqq | | | | |
| 3 |  | | |  | 3 |  | | | | |
| 4 |  | | |  | 4 |  | | | | |
| **Test Scenario** | Check if disabling a user works |  |  |  |  |  |  |  |  |  |
| **Step #** | **Step Details** | | **Expected Results** | | **Actual Results** | | | **Pass / Fail / Not executed / Suspended** | | |
|
| 1 | Create new user TEST2 | | Credentials can be entered, and a new user can be added | | As expected | | | Pass | | |
| 2 | Disable user TEST2 using root credentials | | Unusable user | | As expected | | | Pass | | |
| 3 | Observe an locked user | |  | |  | | |  | | |



(20) PE-14 TEMPERATURE AND HUMIDITY CONTROLS

Operating expensive IT computer equipment for extended periods of time at high temperatures greatly reduces reliability, longevity of components and will likely cause unplanned downtime. Maintaining an ambient temperature range of 68° to 75°F (20° to 24°C) is optimal for system reliability. This temperature range provides a safe buffer for equipment to operate in the event of air conditioning or HVAC equipment failure while making it easier to maintain a safe relative humidity level.

Relative humidity (RH) is defined as the amount of moisture in the air at a given temperature in relation to the maximum amount of moisture the air could hold at the same temperature. In a data center or computer room, maintaining ambient relative humidity levels between 45% and 55% is recommended for optimal performance and reliability.

When relative humidity levels are too high, water condensation can occur which results in hardware corrosion and early system and component failure. If the relative humidity is too low, computer equipment becomes susceptible to electrostatic discharge (ESD) which can cause damage to sensitive components. When monitoring the relative humidity in the data center, we recommend early warning alerts at 40% and 60% relative humidity, with critical alerts at 30% and 70% relative humidity. It is important to remember that the relative humidity is directly related to the current temperature, so monitoring temperature and humidity together is critical. As the value of IT equipment increases, the risk and associated costs can increase exponentially.

## 

## 

## 

## 

(21)IR-4 INCIDENT HANDLING

(22)AU-6 AUDIT REVIEW, ANALYSIS, AND REPORTING

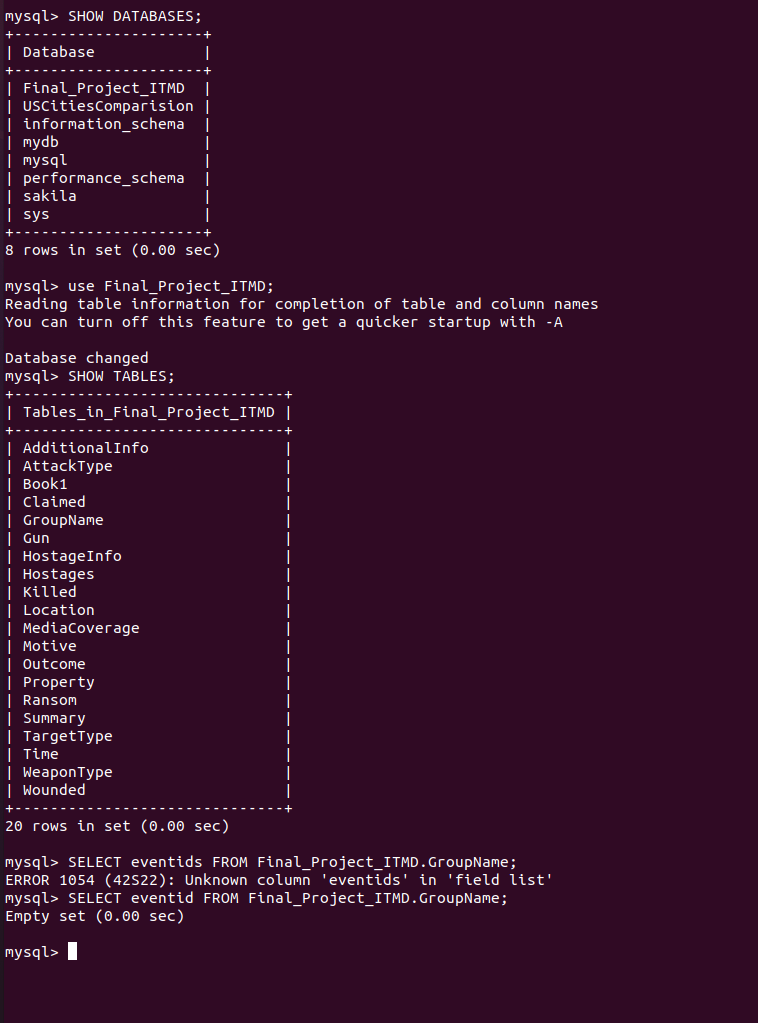
(23)CM-6 CONFIGURATION SETTINGS

(24)CP-2 CONTINGENCY PLAN

(25)CP-4 CONTINGENCY PLAN TESTING

(26)IR-3 INCIDENT RESPONSE TESTING

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Test Case ID** | | a\_008 | **Test Case Description** | | Testing how the SQL handles a certain incident error | | | | | |
| **Created By** | | Marilyn | **Reviewed By** | | Maksym | | **Version** | | 1.0 | |
| **QA Tester’s Log** | |  |  |  |  |  |  |  |  |  |
| **Tester's Name** | | Marilyn | **Date Tested** | | 11/30/2020 | | **Test Case (Pass/Fail/Not Executed)** | | Pass | |
| **S #** | **Prerequisites:** | | |  | **S #** | **Test Data** | | | | |
| 1 | Terminal | | |  | 1 | User = root | | | | |
| 2 | Root password | | |  | 2 | Password = \*\*\* | | | | |
| **Test Scenario** | Enter a wrong command or query to see how to MySQL responds and handles it |  |  |  |  |  |  |  |  |  |
| **Step #** | **Step Details** | | **Expected Results** | | **Actual Results** | | | **Pass / Fail / Not executed / Suspended** | | |
|
| 1 | Open final project database in MySQL | | Database opens | | As expected | | | Pass | | |
| 2 | Open final project tables in MySQL | | Table opens | | As expected | | | Pass | | |
| 3 | Pick a table and type in an incorrect column name from one of the tables | | Incorrect query is entered | | As expected | | | Pass | | |
| 4 | MySQL catches it and flags it as an incorrect column name that can not be found. Instead, it gives hints on how to find to the correct one. | | MYSQL flags it as incorrect and handles the incident by giving guidance to the correct structure of code. | | As expected | | | Pass | | |



(27)AU-4 AUDIT STORAGE CAPACITY

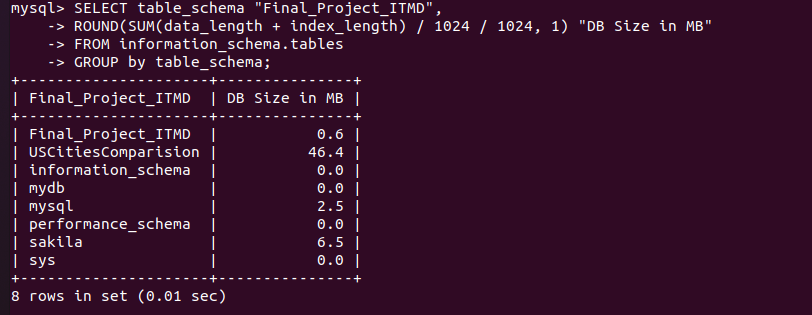
(28)AU-2 AUDIT EVENTS

(29)AU-7 AUDIT REDUCTION AND REPORT GENERATION

(30)SI-4 INFORMATION SYSTEM MONITORING

(31)AU-11 AUDIT RECORD RETENTION

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Test Case ID** | |  | **Test Case Description** | | Revealing Audit storage capacity of database and tables. | | | | | |
| **Created By** | | Marilyn | **Reviewed By** | | Maksym | | **Version** | | 1.0 | |
| **QA Tester’s Log** | |  |  |  |  |  |  |  |  |  |
| **Tester's Name** | | Marilyn | **Date Tested** | | 12/2/2020 | | **Test Case (Pass/Fail/Not Executed)** | | Pass | |
| **S #** | **Prerequisites:** | | |  | **S #** | **Test Data** | | | | |
| 1 | Terminal | | |  | 1 | User: root | | | | |
| 2 | Password | | |  | 2 | Password:\*\*\* | | | | |
| **Test Scenario** | Open database and tables to collect data on the storage capacity |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |
| **Step #** | **Step Details** | | **Expected Results** | | **Actual Results** | | | **Pass / Fail / Not executed / Suspended** | | |
|
| 1 | Open MySQL | | MYSQL opens | | As expected | | | Pass | | |
| 2 | Open Final Project Database | | Database is shown | | As expected | | | Pass | | |
| 3 | Open table | | Table is shown | | As expected | | | Pass | | |
| 4 | Find storage information | | Storage information is shown | | As expected | | | Pass | | |
|  |  | |  | |  | | |  | | |
|  |  | |  | |  | | |  | | |



## (32)AU-12 AUDIT GENERATION

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Test Case ID** | |  | **Test Case Description** | |  | | | | | |
| **Created By** | | Won | **Reviewed By** | |  | | **Version** | | 1.0 | |
|  |  |  |  |  |  |  |  |  |  |  |
| **QA Tester’s Log** | |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |
| **Tester's Name** | | Won | **Date Tested** | | 20201209 | | **Test Case (Pass/Fail/Not Executed)** | |  | |
|  |  |  |  |  |  |  |  |  |  |  |
| **S #** | **Prerequisites:** | | |  | **S #** | **Test Data** | | | | |
| 1 | List of product | | |  | 1 |  | | | | |
| 2 | List of product manufacture | | |  | 2 |  | | | | |
| 3 | Data generating trend/ estimation | | |  | 3 |  | | | | |
| 4 | Audit Editor management | | |  | 4 |  | | | | |
|  |  |  |  |  |  |  |  |  |  |  |
| **Test Scenario** |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |
| **Step #** | **Step Details** | | **Expected Results** | | **Actual Results** | | | **Pass / Fail / Not executed / Suspended** | | |
|
| 1 | Test log in-out | | Data in order | | (good/ bad) | | | Not executed | | |
| 2 | audit data accumulation | | Monitoring audit code accumulation In order | |  | | | Not executed | | |
| 3 | Save audit file | | Save and integration | |  | | | Not executed | | |
| 4 | Code/ decode audit file | | Work in order | |  | | | Not executed | | |
| 5 | editing | | Data correction | | (Yes - how many / No) | | | Not executed | | |
|  |  | |  | |  | | |  | | |

## (33)PE-13 FIRE PROTECTION

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Test Case ID** | |  | **Test Case Description** | | Simulation test | | | | | |
| **Created By** | | Won | **Reviewed By** | |  | | **Version** | |  | |
|  |  |  |  |  |  |  |  |  |  |  |
| **QA Tester’s Log** | |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |
| **Tester's Name** | | Won | **Date Tested** | | 20201209 | | **Test Case (Pass/Fail/Not Executed)** | |  | |
|  |  |  |  |  |  |  |  |  |  |  |
| **S #** | **Prerequisites:** | | |  | **S #** | **Test Data** | | | | |
| 1 | Data Backup center | | |  | 1 |  | | | | |
| 2 | R&R in emergency | | |  | 2 |  | | | | |
| 3 | Fire extinguisher | | |  | 3 |  | | | | |
| 4 | Fire alarm | | |  | 4 |  | | | | |
|  |  |  |  |  |  |  |  |  |  |  |
| **Test Scenario** |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |
| **Step #** | **Step Details** | | **Expected Results** | | **Actual Results** | | | **Pass / Fail / Not executed / Suspended** | | |
|
| 1 | Fire alarm | | Alarm works | | (bad) | | | (fail) | | |
| 2 | Escape through stairway | | No injuries | | (good) | | | (pass) | | |
| 3 | Report the accident | | Report Manager | | (good) | | | (pass) | | |
| 4 | Employee formation | | Formation point | | (moderate) | | | (pass) | | |
| 5 | headcount | |  | | (moderate) | | | (pass) | | |
| 6 |  | |  | |  | | |  | | |

## (34)PS-3 PERSONNEL SCREENING

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Test Case ID** | |  | **Test Case Description** | | Image training | | | | | |
| **Created By** | | Won | **Reviewed By** | |  | | **Version** | |  | |
|  |  |  |  |  |  |  |  |  |  |  |
| **QA Tester’s Log** | |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |
| **Tester's Name** | | Wonl | **Date Tested** | |  | | **Test Case (Pass/Fail/Not Executed)** | |  | |
|  |  |  |  |  |  |  |  |  |  |  |
| **S #** | **Prerequisites:** | | |  | **S #** | **Test Data** | | | | |
| 1 | Grade system | | |  | 1 |  | | | | |
| 2 | Reward system | | |  | 2 |  | | | | |
| 3 | Agreement/ Authorization to screen | | |  | 3 |  | | | | |
| 4 | Screening system(payment, login, financial transaction,) | | |  | 4 | The result should comes out in a number or grade to avoid ethical issue for the general manager | | | | |
|  |  |  |  |  |  |  |  |  |  |  |
| **Test Scenario** |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |
| **Step #** | **Step Details** | | **Expected Results** | | **Actual Results** | | | **Pass / Fail / Not executed / Suspended** | | |
|
| 1 | List up manger pool | | Demographic | | good | | | pass | | |
| 2 | Screening system | | Excellent/Good/ Moderate/ warned/ Bad | | warned | | | fail | | |
| 3 | Report | |  | | good | | | pass | | |
| 4 | Further investigation | | reputation/ background check | | warnerd | | | Not executed | | |
|  |  | |  | |  | | |  | | |
|  |  | |  | |  | | |  | | |

## (35)MP-7 MEDIA USE

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Test Case ID** | |  | **Test Case Description** | | Bench mark | | | | | |
| **Created By** | | Won | **Reviewed By** | |  | | **Version** | |  | |
|  |  |  |  |  |  |  |  |  |  |  |
| **QA Tester’s Log** | |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |
| **Tester's Name** | | Won | **Date Tested** | |  | | **Test Case (Pass/Fail/Not Executed)** | |  | |
|  |  |  |  |  |  |  |  |  |  |  |
| **S #** | **Prerequisites:** | | |  | **S #** | **Test Data** | | | | |
| 1 | Agreement searching/scanning/inspection | | |  | 1 |  | | | | |
| 2 | Update latest devices | | |  | 2 |  | | | | |
| 3 | Radio wave control  (Jammer/wave blocking tech.) | | |  | 3 |  | | | | |
| 4 | Sexual harassment class, male/ female inspector | | |  | 4 |  | | | | |
|  |  |  |  |  |  |  |  |  |  |  |
| **Test Scenario** |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |
| **Step #** | **Step Details** | | **Expected Results** | | **Actual Results** | | | **Pass / Fail / Not executed / Suspended** | | |
|
| 1 | Jammer on | | working/ not working | |  | | | Not executed | | |
| 2 | Scanner check | | good/ bad | |  | | | Not executed | | |
| 3 | Random inspection | | good/ bad | |  | | | Not executed | | |
| 4 |  | |  | |  | | |  | | |
|  |  | |  | |  | | |  | | |
|  |  | |  | |  | | |  | | |

## (36)CP-10 INFORMATION SYSTEM RECOVERY AND RECONSTITUTION

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Test Case ID** | |  | **Test Case Description** | | Simulation test | | | | | |
| **Created By** | | Won | **Reviewed By** | |  | | **Version** | |  | |
|  |  |  |  |  |  |  |  |  |  |  |
| **QA Tester’s Log** | |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |
| **Tester's Name** | | Won | **Date Tested** | | 20201210 | | **Test Case (Pass/Fail/Not Executed)** | |  | |
|  |  |  |  |  |  |  |  |  |  |  |
| **S #** | **Prerequisites:** | | |  | **S #** | **Test Data** | | | | |
| 1 | List up Contact point | | |  | 1 |  | | | | |
| 2 | R&R in emergency | | |  | 2 |  | | | | |
| 3 | Data backup center | | |  | 3 |  | | | | |
| 4 |  | | |  | 4 |  | | | | |
|  |  |  |  |  |  |  |  |  |  |  |
| **Test Scenario** |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |
| **Step #** | **Step Details** | | **Expected Results** | | **Actual Results** | | | **Pass / Fail / Not executed / Suspended** | | |
|
| 1 | Test shut down | |  | |  | | | Not executed | | |
| 2 | Connecting backup center | | (work/ not work) | |  | | | Not executed | | |
| 3 | System recovery | |  | |  | | | Not executed | | |
| 4 |  | |  | |  | | |  | | |
|  |  | |  | |  | | |  | | |
|  |  | |  | |  | | |  | | |